

a silicon-containing substituent;
subjecting the substrate to heat to treat the substrate;
exposing the substrate through a photomask to radiation selected from the group consisting of
high energy radiation having a wavelength of 500 nm or less, X-ray radiation, and
electron beam radiation;
optionally heat treating the substrate; and
developing the substrate in a developing solution.

Please add Claims 17-20.

17. A resist material comprising:
at least one resin;
at least one solvent;
at least one surfactant having a fluorine substituent; and
at least one non-ionic surfactant having neither a fluorine substituent nor a silicon-containing substituent, wherein the at least one non-ionic surfactant is present in the resist material in an amount between 10 ppm and 2000 ppm.

18. A resist material according to claim 17, wherein said non-ionic surfactant is one or more compounds selected from the group consisting of polyoxyalkylene alkyl ether esters, polyoxyalkylene alkyl ether, polyoxyalkylene dialkyl ether, polyoxyalkylene aralkyl alkyl ether, polyoxyalkylene aralkyl ether, polyoxyalkylene diaralkyl ether, and polyoxyalkylene laurylates.

19. A resist material according to claim 17, wherein said at least one surfactant having a fluorine substituent is selected from the group consisting of perfluoroalkylpolyoxyethylene ethanol, fluorinated alkyl ester, perfluoroalkylamine oxide, perfluoroalkylethylene oxide adduct, and fluorine-containing organosiloxane compounds.